# Goal: ENVIRONMENTAL PROTECTION AND ENHANCEMENT

#### **Desired Community Condition(s)**

Residents participate in caring for the environment and conserving natural resources.

Air, land and water systems protect health and safety.

# **Program Strategy: VEHICLE POLLUTION MANAGEMENT**

56509

To protect public health by minimizing harmful vehicle pollutant emissions through the design and operation of cost-effective prevention and control programs.

# Department: ENVIRONMENTAL HEALTH

#### Service Activities

Vehicle Pollution Management

#### Strategy Purpose and Description

To protect the public health and air quality by minimizing harmful vehicle emissions through the design and operation of cost-effective prevention and control programs.

This is achieved by optimizing fuel combustion efficiency in motor vehicles thereby increasing fuel economy and reducing harmful pollutant emissions.

The customers are citizens, motorists, and AirCare inspectors. Currently, Albuquerque is in attainment of the National Ambient Air Quality Standards and motorists can obtain a no-appointment needed emission test at over 130 AirCare Stations for an average cost of \$20 and as little as \$10.

#### Changes and Key Initiatives

New car exemptions were extended to 2 years to enhance customer convenience and program credibility. Possible extension of new car exemption to 2 registration cycles or up to 4 years is being considered.

#### **Priority Objectives**

#### Input Measure (\$000's)

2001	242	242 AIR QUALITY FUND	1,172
2002	242	242 AIR QUALITY FUND	1,172
2003	242	242 AIR QUALITY FUND	990
2004	242	242 AIR QUALITY FUND	1,205
2005	242	242 AIR QUALITY FUND	1,252

Strategy Outcome	Measure	Year	Project	Mid Year	Actual	Notes
Reduce vehicle emissions as a result of identifying and repairing gross polluting vehicles.	PASSING TESTS- Vehicles that pass their biennial emission test	2001	220,000		220,000	
		2002	210,000pas		209,737 passed	

PASSING TESTS- Vehicles tht pass their biennial emission test	2003	222,000 pass	
PASSING TESTS- Vehicles that pass their biennial emission test	2004	210,000 pass	half of subject fleet tested per year
	2005	210,000 pass	

Strategy Outcome	Measure	Year	Project	Mid Year	Actual	Notes
Reduce vehicle emissions as a result of identifying and repairing gross polluting vehicles	FAIL/INVALID TESTS- Vehicles that fail their emission test or are in such disrepair that test can not be completed.	2001	0,0		16,368fail, 9600 invalid	
		2002	16,000fail, 9,000 invalid		13,125 fail, 8,304 invali	
	FAIL/INVALID TESTS- Vehicles that fail their emission test or are in such disrepair that test can not be completed.	2003	22,550			
	FAIL/INVALID TESTS- Vehicles that fail their emission test or are in such disrepair that test can not be copleted	2004	22,500			Vehicle cannot be registered without pass test or time extension for repair
		2005	22,500			
Strategy Outcome	Measure	Year	Project	Mid Year	Actual	Notes
Reduce vehicle emissions as a result of identifying and repairing gross polluting vehicles	RETEST PASS- Vehicles that fail an emission test are repaired and then retested.	2001	0		9,904	Retest Pass
		2002	9,500		9,019	9,500 Retest Pass

RETEST PASS- Vehicles that fail an emission test are repaired and then retested.	2003	8,300	
RETEST PASS- Vehicles that fail an emission test are repaired and retested	2004	8,500	On average, repaired vehilces realized an 83% reduction in hydrocarbons
	2005	8,500	

Strategy Outcome	Measure	Year	Project	Mid Year	Actual	Notes
Maintain National Ambient Air Quality Standards by reducing vehicle emissions via the Vehicle Inspection & Maintenance and the Oxygenated Fuels programs.	TONS OF CO PER DAY WITH/WITHOUT VEHICLE POLLUTION MANAGEMENT PROGRAM	2001	0,0		206 with/319 without	
		2002	202 with/315 without		202 with/315 without	
	TONS OF CO PER DAY WITH/WITHOUT VEHICLE POLLUTION MANAGEMENT PROGRAM	2003	207 with/310 w/o			
Motor vehilces are the principal source of air pollutants inthe Middle Rio Grande Valley Airshed	TONS OF CO PER DAY WITH/WITHOUT VEHICLE POLLUTION MANAGEMENT PROGRAM	2004	207 with/310 w/o			CO tons per day derived from required EPA models which consider fleet mix, vehilce miles of travel, average speeds by roadway type, oxyfuel programs and test and repair program type
		2005	207 with/310 w/o			

Strategy Outcome	Measure	Year	Project	Mid Year	Actual	Notes
Reduce local consumption of gasoline	GALLONS PER DAY DISPLACED Properly maintained and/or repaired vehicles get better gas mileage and the oxygenated fuels program displaces gasoline with domestically produced ethanol	2001	see notes			FY/02: 90,000 of 1,058,000 FY/01: 85,000 of 1,004,000
		2002	in notes			8.5% for 4 months 90,000 of 1,058,000
		2003	8% for 4 m			90,000 of 1,058,000 gallons per day
		2004	8% for 4 m			90,000 of 1,058,000 gallons per day
		2005	8% for 4 m			

Goal: ENVIRONMENTAL PROTECTION AND

**ENHANCEMENT** 

Parent Program Strategy: VEHICLE POLLUTION MANAGEMENT

Department: ENVIRONMENTAL HEALTH

### Service Activity: Vehicle Pollution Management

5609000

#### Service Activity Purpose and Description

The Vehicle Inspection and Maintenance program provides quality assurance oversight of a decentralized (private contractors) emission-testing network to ensure convenient, affordable testing service while preventing consumer fraud. Program staff provides training, techni-cal assistance, and regulation of private AirCare inspec-tors, stations, and equipment. Program staff also over-sees the winter Oxygenated Fuels program ensuring that only cleaner burning oxygenated fuel is used during winter months when vehicle cold-starts result in exces-sive carbon monoxide and hydrocarbon emissions. Primary customers are the citizens of Bernalillo County, vehicle owners, and AirCare inspectors and station owners. Currently, the public health based National Ambient Air Quality Standards are being maintained.

To ensure compliance with this program, the department conducts three different types of audits of air care stations on a quarterly basis. Therefore, each air care station is audited at least once per month.

#### Changes and Key Initiatives

Implemented a pilot low-income assistance vehicle repair program to assist citizens in obtaining timely and effective repairs of their excessively polluting vehicles. In lieu of fining or suspending Air Care stations for non-fraudulent violations, VPMD has entered into Community Service Agreements wherein the station establishes a repair assistance fund at a local licensed repair facility. VPMD then refers qualified vehicles to the repair facility and monitors the cost and effectiveness of the repairs. This results in an immediate fuel economy and air quality benefit where suspending a station or granting a time extension for repair to the vehicle owner do not.

#### Input Measure (\$000's)

2002	242	242 AIR QUALITY FUND	1,172
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2005	242	242 AIR QUALITY FUND	1.252

# Strategic Accomplishments

FY/02: Develop specifications for 4-gas analyzer with OBDII and gas cap test capability

FY/03 (projected): Implement new 4-gas analyzer with OBDII test and real-time electronic data transfer to MVD and VPMD capability.

Output Measures	Year	Projected	Mid-Year	Actual	Notes
# of Covert Audits compared to # of AirCare stations	2001			150/136	
# of Covert Audits compared to # of AirCare stations	2002	150/134		160/133	
# of Covert Audits compared to # of AirCare stations	2003	150/130			
	2004	150/130			
	2005	150/130			
Output Measures	Year	Projected	Mid-Year	Actual	Notes
# of Field Audits compared to # of AirCare stations	2001			1632/136	1,608 / 134
# of Field Audits compared to # of AirCare stations	2002	1,608/134		2,913/133	1,608 / 134

	2004	1,560 / 130			1,596/ 133	
	2005	1,560 / 130				
Output Measures	Year	Projected	Mid-Year	Actual	Notes	
# of Oxyfuel Samples compared to total # of tanks	2001			738/765		
# of Oxyfuel Samples compared to total # of tanks	2002	765/765		732/760		
# of Oxyfuel Samples compared to total # of tanks	2003	760/760				
	2004	760/760				
	2005	760/760				
Output Measures	Year	Projected	Mid-Year	Actual	Notes	
# of Remote Sensing Unit Tests	2001			25,000		
# of Remote Sensing Unit Tests	2002	30,000		43,000		
# of Remote Sensing Unit Tests	2003	36,000				
	2004	36,000				
	2005	36,000				
Output Measures	Year	Projected	Mid-Year	Actual	Notes	
Public visits to referee center for free retest following repair, time extension for major repair or diesel testing	2001			7,788		
Public visits to referee center for free retest following repair, time extension for major repair or diesel testing	2002	7,920		6,718		
Public visits to referee center for free retest following repair, time extension for major repair or diesel testing	2003	7,280				
	2004	7,500				
	2005	7,500				

# of Field Audits compared to # of

AirCare stations

2003

2,780/130